

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
6 December 2001 (06.12.2001)

PCT

(10) International Publication Number  
**WO 01/93121 A1**

(51) International Patent Classification<sup>7</sup>: **G06F 17/60**

(21) International Application Number: **PCT/AU01/00660**

(22) International Filing Date: **4 June 2001 (04.06.2001)**

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:  
PQ 7914 2 June 2000 (02.06.2000) AU  
PQ 8505 30 June 2000 (30.06.2000) AU  
PR 0336 25 September 2000 (25.09.2000) AU  
PR 1461 15 November 2000 (15.11.2000) AU

(71) Applicant (for all designated States except US): **RIVER DYNAMICS PTY LTD [AU/AU]**; Level 4, 46-54 Foster Street, Surry Hills, New South Wales 2000 (AU).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ALLEN, Matthew,**

**Robert [AU/AU]**; 1/21 Mary Street, Hunters Hill, New South Wales 2110 (AU). **HUDGEON, Douglas, Robert [CA/AU]**; 2/21 Guilfoyle Avenue, Double Bay, New South Wales 2028 (AU).

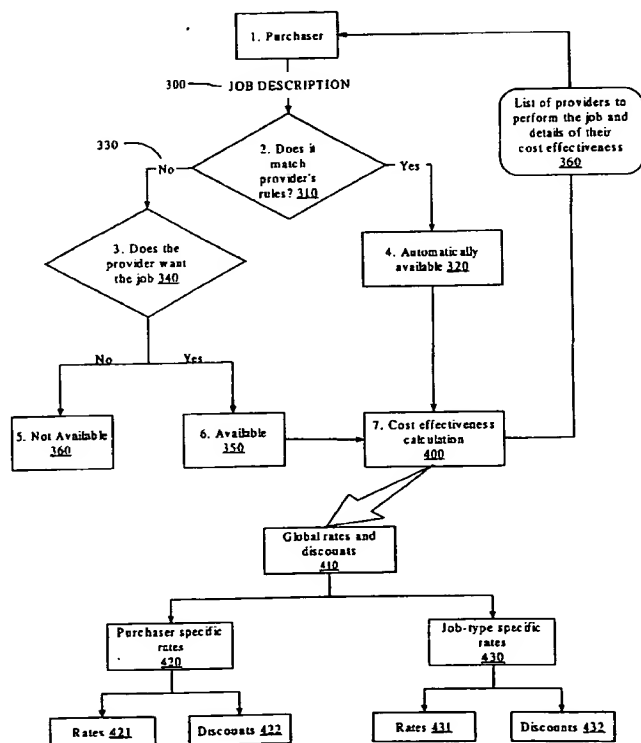
(74) Agent: **FREEHILLS CARTER SMITH BEADLE**; Level 32, MLC Centre, 19-29 Martin Place, Sydney, New South Wales 2000 (AU).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,

[Continued on next page]

(54) Title: **SYSTEM AND METHOD FOR SELECTING A SERVICE PROVIDER**



(57) Abstract: A preferred embodiment provides a selection system to facilitate the provision of services on a computer network to prospective service users. According to a first aspect of the invention provides a system for enabling the selection of a service provider from a plurality of service providers for the performance of a job, said system including, a database which is accessible by a service user via a network, the database including a plurality of records, each record being associated with a service provider, wherein each record includes a service provider profile including a plurality of comparable performance criteria indicative of the performance attributes of the service provider; interface means for receiving a job request comprising at least one desired performance criterion from said service user, and processor means for comparing the stored comparable performance criteria and the at least one desired performance criterion, and for extracting at least one preferred service provider from the database on the basis of said comparison. The invention also provides a method of enabling a service user to select a service provider from a plurality of service providers for the performance of a job, said method including the steps of: providing a database which is accessible by the service user via a network, storing in said database a plurality of records, each record being associated with a service provider, wherein each record includes a service provider profile including a plurality of comparable performance criteria indicative of the performance attributes of the service provider; receiving a job request comprising at least one desired performance criterion from said service user,

comparing the plurality of stored performance criteria with the desired performance criterion, and automatically selecting at least one preferred service provider from the database on the basis of said comparison.

WO 01/93121 A1



IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

— *with international search report*

## **System and method for selecting a service provider**

### **Field of the invention**

The present invention relates to a system and method for facilitating the selection of a service provider to perform a job.

### **Background of the invention**

Potential purchasers of goods are often able to choose the product most appropriate to their needs by examining the product and assessing the quality of its construction and its suitability to the purchaser's needs. Usually, the price of the goods are known and therefore the purchaser may be able to base their purchase decision on a cost/benefit analysis of the product.

In contrast to goods, potential users of a service generally do not have the same level of information available to them on which to base their selection of a service provider.

To ascertain which service provider is the most appropriate, efficient and/or cost effective provider to perform a job can be complex and time consuming process.

Traditionally a tendering process is adopted due to time and cost constraints.

### **Summary of the invention**

According to a first aspect of the present invention there is provided a system for enabling the selection of a service provider from a plurality of service providers for the performance of a job, said system including:

a database which is accessible by a service user via a network, the database including a plurality of records, each record being associated with a service provider, wherein each record includes a service provider profile including a plurality of comparable performance criteria indicative of the performance attributes of the service provider;

interface means for receiving a job request comprising at least one desired performance criterion from said service user, and

processor means for comparing the stored comparable performance criteria and the at least one desired performance criterion, and for extracting at least one preferred service provider from the database on the basis of said comparison.

Preferably the processor means is arranged to extract a plurality of service providers from the database on the basis of said comparison, and to compile a list of the plurality of preferred service providers for distribution to the service user.

Preferably said database is additionally accessible by said service providers via a network for enabling the service providers to update their associated performance profiles.

Preferably said system includes prioritising means for allowing at least two desired performance criteria to be prioritised in accordance with user-selected priorities, and wherein said comparison is made in accordance with said prioritisation.

It is also preferable that the system includes weighting means for weighting at least some of the comparable performance criteria according to their relative importance to the user, to enable said comparison to be made in accordance with said weightings.

It is also preferable that the database includes at least one historical rating field associated with each service provider for enabling a service user to rate at least one past job performed by the service provider.

The at least one desired performance criterion and said comparable performance criteria are preferably selected from a group including the following classes of criteria:

quality criteria, cost criteria and timeliness criteria.

Quality criteria preferably relate to the quality and extent of the resources drawn on by the service provider.

Cost criteria preferably relate to at least one of the following, namely the current cost structure of the service provider, the average cost of similar jobs performed by the service provider in the past, and discounts offered by the service provider.

Timeliness criterion preferably reflects the timeliness of at least one past job performed by the service provider.

Each service provider profile preferably includes at least one qualifying criterion indicative of the ability of the service provider to perform the job, and wherein the job request includes at least one desired qualifying criterion.

It is also preferable that said qualifying criteria relate to at least one of the following, namely the type of service, the area of operation of the service provider and the availability of the service provider.

Preferably the interface means is adapted to receive a selection confirmation from said service user identifying the service provider selected for the job.

It is also preferable that said system additionally includes generating means for generating and sending a job confirmation message to the service provider selected by the service user for the job.

In a preferred embodiment the job to be performed is an investigation.

According to a second aspect of the present invention there is provided a method of enabling a service user to select a service provider from a plurality of service providers for the performance of a job, said method including the steps of:

providing a database which is accessible by the service user via a network,

storing in said database a plurality of records, each record being associated with a service provider, wherein each record includes a service provider profile including a plurality of comparable performance criteria indicative of the performance attributes of the service provider;

receiving a job request comprising at least one desired performance criterion from said service user,

comparing the plurality of stored performance criteria with the desired performance criterion, and automatically selecting at least one preferred service provider from the database on the basis of said comparison.

Preferably a plurality of preferred service providers are automatically selected from the database, and said method additionally includes the step of:

compiling a list of the plurality of preferred service providers.

Preferably the method includes the additional step of:

periodically capturing and storing updated performance criteria in order to update the stored profile of least one service provider.

It is also preferable that the database is accessible by said plurality of service providers and wherein said method includes the additional step of:

enabling the service providers periodically to update their associated performance profiles in the database.

Preferably the job request includes a plurality of desired performance criteria and wherein said method additionally includes the steps of:

enabling the service user to prioritise at least two desired performance criteria; and

automatically selecting the at least one preferred service provider on the basis of the prioritisation.

It is also preferable that the method includes the steps of:

allowing said user to allocate a weighting to said comparative performance criteria indicative of the relative importance of said comparative performance criteria to the service user; and

automatically selecting the at least one preferred service provider at least partially on the basis of said weightings.

In a preferred embodiment the database includes at least one historical rating field associated with each service provider, and wherein said method includes the steps of :

enabling a service provider to rate at least one past job performed by said service provider; and

capturing said rating said at least one historical rating field associated with the service provider.

The at least one desired performance criterion and said comparable performance criteria are preferably selected from a group including the following classes of criteria:

quality criteria, cost criteria, and timeliness criteria.

The quality criteria preferably relate to at least one of the following, namely the quality and extent of the resources drawn on the service provider.

The cost criteria preferably relate to at least one of the following, namely the current cost structure of the service providers, the average cost of similar jobs performed by the service provider in the past, and discounts offered by the service provider.

The timeliness criterion preferably reflects the timeliness of at least one past job performed by the service provider.

Preferably the said service provider profiles includes at least one stored qualifying criterion indicative of the ability of a service provider to perform the job, and in which said job request includes at least one qualifying criterion, wherein said method includes the initial step of;

comparing said stored qualifying criterion with said desired qualifying criterion to select at least one qualified service provider on the basis of said comparison;

wherein at least one preferred service provider is a subset of at least one qualified service provider so selected.

The qualifying criteria preferably relate to at least one of the following, the namely type of service, the area of operation of the service provider and the availability of the service provider.

Said method preferably includes the step of:

receiving a selection confirmation from said service user, stating at least the preferred service provider selected by the user.

In a further preferred embodiment the method includes the step of :

generating and sending a job confirmation message to the service provider selected by the service user.

Preferably the services are insurance investigation services.

In the description and claims of this specification the word "comprise" and variations of that word, such as "comprises" and "comprising" are not intended to exclude other features, additives, components, integers or steps but rather, unless otherwise stated explicitly, the scope of these words should be construed broadly such that they have an inclusive meaning rather than an exclusive one.

### **Brief description of the drawings**

Notwithstanding any other forms which may fall within the scope of the present invention, preferred forms of the invention will now be described, by way of example only, with reference to the accompanying drawings in which:

Figure 1 is a schematic illustration of a first embodiment of a selection system of the invention for the offer of services from a number of service providers to a service request;

Figure 2 is a schematic flowchart of the steps involved in implementing and using the system shown in Figure 1;

Figure 2A shows a flowchart of the steps involved in implementing an embodiment of the present invention, in which a cost effectiveness calculation for each potential service provider is provided to the service user;

Figure 3, 4 and 5 shows a series of displays from an Internet browser as seen by an insurance company when entering a job request into a selection system according to an embodiment of the present invention;

Figure 6 and 7 each show a display from an Internet browser as seen by an investigation company when entering their service profile into a selection system according to an embodiment of the present invention;

Figure 7A shows another screen available to an investigation company for entering their costs for a plurality of service elements into a selection system according to an embodiment of the present invention;

Figure 8 shows a screen of an Internet browser showing the pending tenders made by a service provider;

Figure 9 shows a screen from an Internet browser as viewed an investigator showing available jobs in a selection system;

Figure 10 shows a display from an Internet browser as seen by an insurance company listing a number of jobs for which job requests have been entered into a selection system according to an embodiment of the present invention;

Figure 11 shows a screen listing a number of potential service providers and associated quality ranking in respect of a job entered into the system by the insurance company;

Figure 11A shows a screen of an Internet browser as seen by an insurance company setting out the performance criteria for a job entered into a selection system according to an embodiment of the present invention;

Figure 12 shows a screen of an Internet browser as viewed by an insurance company, which the insurance company can use to assign weightings to each of the performance criteria entered into the system by a service provider;

Figure 13 shows a display of an Internet browser as seen by an insurance company listing all of the uncompleted jobs currently listed in the selection system;

Figure 14 shows a display of an Internet browser as viewed by an investigation company showing a list of all uncompleted jobs for which they have been selected;

Figure 15 shows a display of an Internet browser as seen by an insurance company, which may be used to enter feedback on the quality, timeliness and cost effectiveness of a job performed by a service provider.

#### **Detailed description of the embodiments**

In broad concept the present invention provides a system which can be used by an individual or organisation wishing to select a service provider to perform a service, or do a job, from a group of service providers.

Preferably in using the system and method as described the service providers are aware that the attributes of their services (including price) will be compared with those of other service providers, thereby fostering competition within the marketplace. Accordingly the system and method described may provide means for trading in services of relatively low value which has the benefits of a tender system without requiring service providers to tender on a job-by-job basis.

In the present embodiment the system is particularly suited for selecting services, which can be readily broken down into a number of service components or elements. Typically service elements will be tasks or features of the service for which, service providers can allocate a discrete fee, and which the procurer of the service can readily use to define the scope or quality of the service desired.

The first step in using the system according to this embodiment is initialisation. This is done by defining a set of performance criteria which describe the attributes of a service, or attributes of the elements of the service. The service performance criteria can be used by a service user to describe a job they need performed, and by the service provider to describe attributes of the services which they perform.

The initialisation process begins by defining the elements of the service and the performance criteria which describe them. The performance criteria describing the services can include attributes relating, inter alia, to;

- the nature of the services;
- specific attributes of the services; and
- the cost of the service, or the cost of specific elements of the service;
- the quality or type of equipment and/or resources required to perform a service;
- the qualifications or association memberships desired by people performing a service;

Other attributes of the service provider performing the job, which can affect the kind, quality or style of service performed are the length of time in business; and

historical information relating to the performance of past services which may be indicative of the level of service provided, such as the percentage of past jobs completed within a set deadline; the satisfaction of previous service users with the service offered, and the average cost of previous similar services performed.

As will be appreciated by the person skilled in the art that the extent of the performance criteria and the type of performance criteria used will vary depending on the breadth or type of services included in the system, the sophistication of the system desired and many other factors. For example, if the system is limited to selection of a service provider from a group who all perform the same service then no functional criteria relating to the type of services performed will need to be defined. Alternatively, if various types of services are offered using the system then functional criteria will be required in order to determine service providers who are able to do a particular job.



The next step in the initialisation of the system is to build a database of service provider profiles, which contain a description of the services performed by each service provider in terms of the performance criteria. The performance criteria stored in the database for each service provider can include all, or only a subset, of the defined performance criteria. The service provider profiles stored in the database can be generated by allowing service providers to access the system, either via the Internet, using a computer running a web browser application or a proprietary software program, and defining their service provider profile by answering a number of questions or by completing an online form etc. Direct access via a dedicated link to the database is also possible.

Once the performance criteria are defined, a person or organisation wishing to procure a service can use the system to obtain a list of one or more service providers who are able to perform the service from the system, from which a service provider can be selected.

To obtain such a list the prospective service user sends a job request to the system describing a set of desired performance criteria for the job. In response to the request the system produces a list of one or more potential service providers whose performance criteria match the desired performance criteria requested by the service user.

It is also possible that the performance criteria specified by the service user can be grouped into two or more classes, such as a class of criteria that must be possessed by a service provider if they are to be chosen, and a group of performance criteria which are preferred but not essential. Furthermore the inessential performance criteria requested by the service provider can be ranked in order of importance, or combined into quantitative measures of suitability with weightings applied to the performance criteria depending on the user's preferences. In this case the list of potential service provider(s) will also typically include one or more suitability ratings or rankings based on the inessential performance criteria. From this list the service user can select a service provider.

Typically the price at which a service provider will do a job will be an important factor to a service user in choosing a service provider, and in fact it may be the only factor of interest the service user. The performance criteria related to the cost of each service provider can be used to generate a relative cost estimation of each service provider that can be presented to the service user to enable the most cost effective service provider to be selected. An example of a system which provides a number of quantitative measures with weighted criteria, and a relative cost estimation is given below.

In further embodiments the system can also be adapted to track the provision of the service and provide feedback on services currently in progress, or services provided in the past, to both the service providers and the service users. Furthermore, after a job has been completed by a chosen service provider, the service user is given the opportunity to submit their own evaluation of the service provider's performance criteria for the job just performed. Such historical data can be stored as performance criteria in the service provider's profile and used to compare the service provider with its competitors in the future.

Referring to now Figure 1, there is shown a schematic illustration of a computer network 10 comprising an interconnected network of computer terminals or the like, including;

a selection system server 12; and

a plurality of service providers' terminals 24, 26; and

a plurality of service users' terminals 28, 30.

Interconnections between each of the abovementioned parties can be made via the Internet 16, or other networking means such as a LAN or WAN, a dedicated line or the like.

The selection system server 12 includes the following:

- (a) a database 18 for storing a plurality of records containing service provider profiles for the service providers 24, 26 and optionally, a plurality of records containing performance criteria preferences for the service users connected to the system.
- (b) an application program 20 for running the selection system; and
- (c) data which constitutes a website(s) 22 which comprise a plurality of web pages that can be downloaded via the Internet 16 from the server 14, by either, or both service providers and prospective service users.

A number of service providers 24, 26 are registered with the selection system provider 12 ie. the service providers 24, 26 have a service provider profile stored in said database 18. For illustrative purposes two service providers, 24 and 26 are shown; it is anticipated that a far greater number of service providers may offer their services via the selection system. Also shown in Figure 1 are two typical service users 28 and 30, who are able to lodge a service request with the database 18 as described below.

The service providers and service users are able to access the website 22 stored on server 12 in order to use the selection system. In this example service provider 24 uses a personal computer to access the website 22 via the Internet 16, whilst service provider 26 downloads various pages from website 22 via the Internet 16, in XML format from their mobile phone with WAP capabilities. The service users 28, 30 have access to the website 22 via the Internet 16 and are able to post service requests for the provision of services as will be explained below.

Figure 2 shows a flow chart comprising a number of steps in a method of using the system of Fig 1. In an initial step 2.0 a plurality of classes of performance criteria are defined describing the elements of the service to be procured using the service. The performance criteria defined in this embodiment are classified quality criteria, cost criteria, timeliness criteria groups. The quality criteria 2.5 are comprised of criteria relating to quality of the product 2.6, and quality of resources 2.7. The cost criteria 2.8 are comprised of criteria relating to the average cost of past invoices 2.9, present rates of service providers 2.10, and predictions of future invoices 2.11. Furthermore, functional performance criteria such as the type of service, and where and when the service will be preformed are also defined at 2.2 for the initial selection process.

Once the system is initialised in step 2.0 service providers define their service profiles which are stored in the database 18. The performance criteria used by the service providers include both functional criteria relating to jobs which they are able and willing to perform as well as information relating to the quality, costs and timeliness of services performed. In this embodiment, once historical data is accumulated it can be included in the performance criteria of a service provider.

In step 2.1 a portal user can send a job request describing a job for which they require a service provider. Such a job request will be made in terms of desired performance criteria for the service. Again, this can include both functional criteria required by the service user and additional performance criteria which may effect their choice of service provider. In alternative embodiments the desired performance criteria can be ranked in order of importance to the service provider. The service user can additionally have a record stored on a database which contains a list of preferences which the service provider wishes to use in order to rank potential service providers.

In the present embodiment, once the service user makes a job request it is entered into a list of service requests in the selection system. The job request is interpreted by the selection system as a database query and extracts a list of potential service providers from the database whose service profiles match the job request. In order to receive the list extracted from the database the service user accesses the list of service requests and downloads a web page including a list of potential service providers whose performance criteria match at least those desired performance criteria included in the job request.

In order to generate the list of potential service providers the system performs a comparison between the desired performance criteria in the job request made by the service user and the performance criteria of each service provider. The list provided to the service user will only include the service providers who, according to their performance criteria are willing and able to perform the service desired. The list will also include a suitability rating for the quality, costs and timeliness of each service provider which the server user can use to select the most desirable service provider for the job.

The suitability ratings of quality, cost and timeliness are generated by comparing the performance criteria of each service provider one another, and numerically ranking the preselected service providers accordingly. As some of the performance criteria will be rated more highly by a service user than other criteria, a set of weightings are supplied by the service user when making a request, or are pre-loaded into the selection system in order to weight each performance criterion according to its importance to the service user. Furthermore, some service criteria may be irrelevant to the service being requested, in which case no account will be taken by the service provider of these criteria in making a decision on which service provider to select for a particular job. Accordingly a weighting of zero can be given to either irrelevant performance criteria or performance criteria considered to be of no value to the service user.

A flow chart detailing an embodiment of this process is contained in figure 2A. Initially a purchaser of the service makes a job request 300 describing the job. The description is matched against each service provider's rules of performing a job (step 310). If the service provider's performance criteria match they are automatically included (step 320) in the list of potential service providers and included in the subsequent step of calculating cost effectiveness calculations (step 400). Alternatively if the service provider's performance criteria does not match the job description (step 330) the service provider is still given the opportunity to perform the work (step 340). If the service provider wants the job (step 350), he or she can make themselves available by submitting suitable a set of performance criteria to the system. If a suitable tender is submitted the service provider is included in subsequent cost effectiveness calculations. If the service provider is not interested in performing the job they can simply ignore the job request or state that they are not available (step 360).

In this example the only suitability rating generated by the system is a cost effectiveness calculation (step 400). In order to make this calculation the system first looks in the database for the rates charged by each service provider. If the service provider offers "purchaser specific" rates for a particular service provider then these rates are in the cost effectiveness calculation (step 420). If job-type specific rates (step 430) are offered then these are used. Each of the "purchaser specific" or "job type specific" rates defined by the service provider can include a set of rates 421, 431 for each element of the service provider, as well as a set of discounting rules or discounted rates 422, 432 for each element. If "purchaser specific" or "job type specific" rates are not offered by a service provider then their global rates are used to calculate the expected cost for the job. The expected cost for each service provider is calculated by adding the rates charged by the service provider for each element of the job. Once an estimated cost is calculated for each service provider, the service providers are ranked according to their cost effectiveness, and a list of potential service providers and their associated cost effectiveness rankings are supplied to the service user (step 360). From this list the service purchaser can select a service provider to do the job.

Returning to figure 2 a series of steps, marked generally as 230, denotes a plurality of rankings performed by the selection system. Each criterion group, e.g. quality of product 2.6, and quality of resources 2.7, are comprised of weighted sums of comparisons made between service providers in respect of one or more performance criteria. Furthermore the relative importance of the criteria groups can be ranked by the service user and combined into a single quality ranking, provided with the list in step 2.4. Similarly, a comparison of performance criteria relating to cost can be compiled into one cost ranking. It may be the case that only the present rates of the service provider for performing a job are of interest to the service user. In this case the "average of past invoices" rating 2.9 and "predictions of future invoices" ratings 2.11 are weighted to a value of zero, so that the cost rating provided to the service user reflects only an estimate of the expected cost of the service based on the service provider's present rate.

A series of feedback steps marked generally as 250 are also included in the process. In these steps the performance criteria of past jobs performed by a service provider are fed back into the database. These historical data are used in determining future ratings of the service provider.

Selected steps in Figure 2 will now be explained in greater detail.

***Step 2.2 - Service Provider describes services performed***

Initially service providers 24, 26 access a perform a registration web page on the web site 22 via their respective terminals and submit their performance criteria describing the attributes of the services that they are able to perform, or are willing to perform; The information submitted includes information relating to each of the performance criteria defined in step 2.0.

This information is stored in the database 18 as a service provider profile and is compared to profiles of other service provider's in step 2.4.

***Step 2.1 - Submission of service requests by selection system user***

Service users 28, 30 access a web page on the web site 22 via their respective terminal and submit a job request via the Internet 16 to the server 14. The request is a description of the requested service in terms of the

user's preferred performance criteria for the job. The information submitted with the job request is used, in part, to calculate the evaluation information associated with each service provider in step 2.4.

The application program 20 issues instructions to record the received job request data in the database 18 and to post it on a web page of the web site 22. The identity of the user requesting the service may or may not be posted on the website with such a request. In this embodiment requestor 28 remains anonymous.

***Step 2.4 - Prospective service users review list of available service providers***

For each job request posted, the service user 28 30 can download a web page from web site 22 which lists the potential service providers extracted from the database 18 by the selection system whose performance criteria correspond with the preferred performance criteria contained in the potential user's job request. Next to the list of service providers is a set of associated suitability rankings associated with each service provider.

To extract the list of potential service providers from the database the initially a set of essential performance characteristics, such as the type of job and location of the job are compared with the performance criteria of each service provider. If a service provider's profile does not match these functional performance criteria they are discarded as potential service providers and the calculations of the suitability ratings for the remaining service providers are continued.

If a service provider cannot or will not provide a particular element of a service, ie. the service provider's profile does not contain any specified essential performance characteristics the service provider is given the opportunity to upgrade or change their profile to redefine their performance characteristics in order to be included in a the list of potential service providers presented to the potential service user.

In this embodiment, the associated evaluation information includes a comparison of following classes of performance criteria:

- a) Service capabilities;
- b) Quality criteria (2.5);
- c) Cost criteria (2.8); and
- d) Timeliness of past performance (2.12).

***Step 2.5, 2.8, 2.12 - Calculation of suitability ratings***

Calculation of each of suitability ratings for each service provider is comprised of a number of sub calculations.

Turning now to the calculation of a Quality rating for each of the service providers. The quality criteria in this example are made up of the two components of Resource Quality and Product Quality. In step 2.7 of fig 2 the Resource Quality of each service provider is compared with each other. To do this the selection system application calculates a weighted sum of the values stored in the database for each service provider in respect of the particular performance criteria of interest to the service user characteristic weighed by an importance rating of each criterion

assigned by the service user. Similarly, a rating of the quality (Product Quality) of a service previously performed is assessed.

The Resource Quality (step 2.7) of a service provider (24,26) includes an evaluation of the service provider's equipment, personnel, management structure, intangibles, and business processes. In this example, the evaluated resources of an service provider may include such factors as the type and quality of the photographic equipment available to the investigators or the quality of the security systems installed in their offices, length of time in business etc.

If a particular performance resource quality criteria is important to a service user they are able to weight that resource quality criteria more heavily than a resource quality criteria of lesser importance.

The "Product Quality" criteria of step 2.6 includes a comparison of an average of the service user's evaluation ratings for jobs previously performed by each service provider using historical data stored in the database 18.

The Resource Quality and Product Quality are amalgamated into a single rating of the Quality of the service provider (2.5). Again the relative importance of Resource Quality 2.7 and Product Quality 2.8 to the service user can be accounted for by applying an appropriate weighting to a sum of the two ratings.

In relation to the cost criteria in step 2.8, the estimated cost of a particular service is calculated by summing a weighted ratings in respect of the following criteria:

- (a) a rating of the amounts previously charged similar jobs (step 2.9 Historical Costs);
- (b) a calculation of the approximate cost of the job (step 2.10) using the current rates charged by the service provider for each element of the job; and
- (c) discounted rates, special fee structures or a tender submitted by the service provider for providing the service (step 2.11).

Historical Costs (step 2.9) are calculated by determining the average hourly rate for the provision of similar services. For example, a company has historically charged an average of \$100 per hour for services conducted in the suburb of Parramatta, NSW, then an estimate, based on this historical data of the cost for conducting a job of 12 hours duration in Parramatta is \$1200. The historical costs of all potential service providers can be compared and service providers ranked accordingly.

In step 2.10 the selection system estimates the cost of performing the job for each service provider and generates a relative measure of cost effectiveness based on this calculation. As discussed above the job to be performed has been described in terms of the elements which must be performed to do the job, and each service provider profile has a cost stored in their service provider profile in the database for each service element that they are able to perform. Therefore, in order to calculate the estimated cost for each service provider the cost of each of the elements which make up the job can simply be added up.

Travel is one element of many services for which a fee may be charged. In some industries travel costs may be key factor in determining which service provider is the most cost effective for doing a job. In order to

calculate the travel cost for a service provider the system calculates the distance between the job location and the nearest bill-out location for each service provider then multiplies this by the service provider's cost per kilometre charge rate. The time component for travel is also calculated by multiplying the expected travel time by the service provider's cost per hour for travel. The time and distance components are added together to calculate a total expected travel cost which can be added with the cost of other elements of the service to determine the total expected cost for performing the job.

Service providers are able to set up their user profile to include different cost structures for different service users, or set up rules for calculating the cost of each service element. Thus the service providers can offer discounts either by service provider, by the amount of work received, or by geographical location or other criteria that they specify.

In relation to the timeliness criteria (Step 2.12), the selection system user (28,30) may review evaluation information from other service users as to the timeliness of jobs previously performed by the service provider.

#### ***Step 2.13 - Service provider chosen and retained***

In step 2.4 the application program 20 compiles a webpage 22 that is accessible by the service user who has made a request for service, which sets out the evaluation information for all potential service providers i.e. those service providers able to perform the service.

After considering the list of suitability ratings generated from each service provider's quality criteria (step 2.5), the cost criteria (step 2.8), and the timeliness criteria in (step 2.12), the service user (28,30) can select the service provider who has the most desirable criteria to perform the job according to the selection system user's (28,30) own preferences.

The application program can also calculate an amalgamation of this criteria into a single rating, which can be provided to the service user (28,30). The service user (28,30) is permitted to vary the amalgamated criteria, by weighting the importance each particular criterion.

On this basis a service provider can be selected and retained.

#### ***Step 2.15 Service Performed***

During performance of a job the service providers (24,26) receive feedback from their service users (28,30). In addition, the service users (28,30) or, optionally, the service providers (24,26) can vary the service criteria for the job during the course of the job due to changing circumstances.

#### ***Step 2.16 Service Completed and Billed***

After completion of the job, the service provider's (24,26) invoice is presented to the service user (28,30). The service user (28,30) or the service provider (24,26) enters the amount of the invoice into the system using a form on a web page on the website 22. The data from this form is stored in the database 18 as a part of the service providers profile, and can be used to determine the Historical Costs of services performed by the service provider.

Optionally, the feedback supplied can include an evaluation by the service user (28,30) of the reasonableness of the invoice amount given the job performed which can be stored as a part of a provider's profile.

***Step 2.17 - Service Analysis***

Upon completion of the job the service user (28,30) can evaluate the job performed by the service provider. The service user (28,30) can evaluate the Product Quality and/or the timeliness of the service.

Submission of the evaluation is completed by filling in a form located on a web page of the web site 22. This information is sent to the server 14 and recorded in the database 18 as part of the service provider's profile and used for calculating future evaluation information for the service provider. The evaluation information can also be used by other prospective service users (28,30) in evaluating the service providers (24,26) as described above.

***Step 2.3-- Service Providers review list of service requests***

In most instances the system functions in an almost instantaneous manner with prospective service users selecting a service provider immediately upon being provided with a set of potential service providers and associated suitability ratings. However in some cases, jobs will not be allocated to a service provider immediately in which case, a service provider 24, 26 can download a web page from website 22 in which a list of service user requests are posted. The user requests are comprised of a list of the desirable performance criteria that are required satisfy the service user.

When an unallocated job exists a service provider is given the opportunity to amend their service profile to discount their services or to make themselves eligible to do a job they otherwise would be unqualified to do. For example a service provider may initially state that they only work within a 50 kilometre radius from their offices. However, a job may be pending which is only a short way beyond that limit. If the service provider wishes to be eligible to do this work they can amend their profile to make themselves eligible, and thus become a potential service provider. A discounting process may also be included in the system whereby a "once-off" discount can be offered to increase an investigator's chance to be chosen for a job.

***Step 2.14 - Feedback to service providers***

Each of the service providers can access yet another web page on the web site 22 and view information on the performance criteria of the other service providers and use this information in setting their own profile, for example, by discounting their rates for a particular job.

A preferred implementation the system and method will now be described with specific reference to a selection system used by an investigation company for selecting an investigator to perform an investigation. It should be noted that in describing the preferred embodiment, the description of a selection system choosing an investigator is for the purposes of description only and is not intended to limit the scope of the invention. The invention can extend to other services including, inter alia, legal services, employment services, graphic design services, telecommunications services, webhosting services etc.



In this embodiment, the service user (28 of Figure 1) is an insurance company, which requires the services of an investigation company (Service Provider 24 or 26 of Figure 1) to investigate whether claims made by an insurance claimant are legitimate.

With reference to the system of Figure 1 and 2, the insurance company posts a notice on a web site 22 via the server 14 (Step 2.1) requesting an investigation service ("investigation Request"). Turning to Figs 3, 4 and 5, the insurance company 28 enters an internal reference 'File number', 'File Name' into the form shown on the screen in Figure 3. These details allow the insurance company to track the job through the system. The application program 20 then generates the virtual form shown in Figure 4 and the claims officer of the insurance company 28 enters data in the following fields:

- Job Type : 'Surveillance';
- Job Completion Date: '11:00, 22 Sep 2000'
- Base Suburb: 'None'
- Suburb & Interview Hours: 'Hurstville = 12 hrs'; 'Gosford' = 16 hrs

Each of the fields comprise performance criterion, as described above in relation to step 2.0 above. The "Job Type" and "Suburb & Interview Hours" fields are performance criteria which must be matched by a service provider if they are to be eligible to perform the service. The 'Base Suburb' field permits those investigation companies to nominate the suburb that they want the investigation billed from. The Suburb & Interview Hours field relates to the suburbs in which the investigation has to be conducted, and the number of hours or the estimated number of hours the insurance company wants spent on the job.

Once this information has been completed by an Officer of the insurance company 28, and submitted via the Internet 16 to the database 18, the application program then generates the screen shown in Figure 5. This screen allows the user to review the job request and possibly amend it, before it is posted for review by investigation companies (eg. 24, 26).

As described above, each investigation company using the selection system must enter their profile, ie. their service attributes in terms of the performance criteria, and their contact details into the selection system database 18. In order to enter their performance criteria into the database 18 the investigation companies (24, 26) list their resources and other attributes using the online form shown in Figure 6. These details are stored in database 18 are used by the selection system to rank the investigation companies in terms of suitability for each service request.

Furthermore they enter functional performance criteria as shown Fig 7. In this embodiment, the investigation company 26 states that it is able to conduct Surveillance or Factual investigations for CTP, Workers Compensation or Public Liability matters within 100 kilometres of its bill-out suburb. The bill-out suburb is the suburb from which the investigation company bills its travel costs. Due to the nature of insurance investigation, insofar as that investigators are often based in their personal residences rather than an office, if an investigation company has numerous investigators, the investigator will have numerous bill out suburbs. In this embodiment, the

Application Program 20 calculates the closest bill-out suburb for every investigation company for each investigation. Since travel costs often represent a significant proportion of the total cost of an investigation such a system generally results in the lowest cost outcomes for each job being presented to the service requestor.

Cost criteria are also stored in the database 18 in the form of the rates charged by the investigation companies (24,26) for each element of the services performed.

In a particularly sophisticated embodiment a different profile can be used by a service provider depending on the identity of the service user. In this way special discounts or equipment can be offered to selected service users in order to increase the likelihood of selection for a job. In this embodiment, if the investigation companies (24,26) do not have personalised rates negotiated with the insurance companies (28,30), then their standard rates stored in database 18, are used in the calculations of the cost of the investigations for the insurance company.

The display of Figure 7A illustrates to an agent of an investigation company the input fields for each of the elements of an investigation job. The elements of 'surveillance' and 'factual' investigation work for which cost criteria exist are:

- (a) travel rate;
- (b) per kilometre rate;
- (c) hourly rate; and

There are also two fields for varying the costs as shown in Figure 7A. These can be used to specify discounts for a particular insurance company, or amount of work.

In order to alert the investigation company to jobs on offer which the investigation company is qualified to perform, a page as shown in fig 8 is generated. The investigation companies (24,26) can view this web page that displays a list generated from the database 18 of all investigation requests that meet the functional criteria of the service provider. For example, if a job is put out by insurance companies (28, 30), for a particular locality and the investigation company is not prepared to conduct work in that geographical area, then this job will not be displayed on the investigations company display shown in Figure 8.

The investigation requests are listed and according to criteria set by the investigation company. For example, they may be ranked by insurance company, estimated value of work, time for completion etc.

Figure 8 lists all jobs currently in the system with the respective performance criteria required by the service user. A field also exists labelled "job box" which allow the investigation company agent to conveniently select any one of the jobs and submit a tender for investigation services. The investigation companies (24, 26) may offer to perform this work at a discounted rate. In this embodiment, the investigation companies (24, 26) offer discounts for receiving large quantities of investigation Requests or they may offer discounts for several investigations performed in the same geographical area. For example, an investigation company may offer to conduct an investigation at reduced travel cost in Bathurst, NSW if they are conducting other investigations in that area.

As shown in Fig 9 the investigation companies (24, 26) may also view a list of investigation Requests that fall outside of their functional criteria. If an investigation company wishes to perform an investigation that falls

outside of their functional criteria then they click on the "job box" link that indicates to the insurance company that placed the service request that the investigation company is available to perform this work. For example, by clicking on the "job box", an investigation company may indicate that they are willing to perform an investigation in Gosford, NSW, even though it falls outside of their work criteria. Alternatively they may change their profile to include the new area in their service area.

As shown in Figure 10 the insurance companies (28, 30) may view a list of all Service Requests they have entered in to the database 18 via the web site 22 where they have not yet chosen an investigation company to perform the service. From this screen the insurance company can select a job and view each investigators evaluation information for it.

Turning now to Fig 11, which shows an output for the system for the job input in Figs 4 and 5.

This figure displays a list of potential service providers and their associated suitability ratings, as seen by a claims officer of an insurance company. The insurance company (28,30) is presented with a ranked list of all investigation companies (24, 26) who are available to perform that work (according to a comparison of the investigators functional performance criteria with the job request.)

The "T" rating shown in Figure 11 is the timeliness rating for each of the investigation companies who are available to perform the investigation. The "Q" rating is the quality rating for each of the investigation companies. The "Q" rating is an amalgamation of the quality ratings of their previous work as rated by the insurance company making the request (28, 30), the resources rating for of the investigation companies.

An example of the calculation of each of the suitability ratings will now be described from data input in the job request of fig 4 and 5.

#### **Present Rates 'RIV'**

The RIV rating represents the relative cost effectiveness of the investigation companies. The RIV value is calculated based on the distance between the closest bill-out suburb for the investigation company and the site of the investigation. As described above the travel distance is multiplied by the investigation company's travel rate per kilometre and added to the expected travel time multiplied by the travel rate per hour. This calculation is added to the number of hours of investigation multiplied by hourly rate for investigation. To determine the estimated cost of the job.

Figure 11A shows the details of the distance and travel time for Lidsan investigations. The bill-out suburb for Lidsan investigations is Parramatta which is 21 kilometres and 0.48 hours return from Fairfield (the location of the job). Lidsan charges \$0.50 per kilometre for travel and \$50.00 per hour for travel time, giving a total travel charge of \$34.50. Lidsan charges \$50.00 per hour for investigation time. The investigation in this instance comprises 4 interviews in one session. Each interview is expected to take one hour, for a total interview cost of \$200.00, resulting in a total cost of \$234.50 for these aspects of the investigation.

This figure is compared to the estimated cost of the other investigators and ratings calculated. The RIV ratings received by the investigation companies and normalised to a value out of 5. As can be seen in Figure 11,

Marmsell investigations is the closest investigation company or has the least expensive rates and therefore receives a RIV rating of 5, with Lidsan investigations receiving the second best RIV at 4.64.

### Quality 'Q'

The quality rating is a combination rating covering the resources held by an investigation company (2.7), the insurance company's valuation of the resources, and the historical quality rating given by the insurance companies (2.6). In this embodiment, the ratings seen by the insurance companies for quality are an amalgamation of an investigation companies ratings given to their past work, and the resources of the investigation companies (24, 26). The insurance company rates the importance to them of the performance criteria relating to the resources possessed by the investigation companies by filling in the form shown in fig 12. It can be seen that each of the resource quality factors with the exception of one is rated of the same importance by this insurer.

The component of Q based on resources quality can be calculated using the following formula:

$$\frac{\sum_{i=1}^n Rating_i \cdot Criterion_i}{5n}$$

where  $Rating_i$  is the importance rating of the "ith" quality criterion set by the insurer on a scale of 1 to 5, and,  $Criterion_i$  is the value for the "ith" quality criterion stored in the database for each the investigator, and n is the total number of quality criterion.

### Timeliness 'T'

The timeliness rating are calculated from a comparison of the historical ratings given by insurance companies for jobs performed by the investigation company.

### Cost Quality Rating 'CQ'

The CQ rating is a combination of the other ratings shown on Fig 11.

To calculate CQ firstly, the RIV, Q and T are normalised to a value out of five as compared to all of the potential investigation companies available to perform the job to determine the Adjusted RIV, Adjusted Q and Adjusted T values.

The insurance company determines the relative weight that is to be given to each of the RIV, Q and T criteria by allocating an importance weighting. In the example shown in Fig 11, the insurance company has rated each of the RIV, Q and T equally at 5 points. Thus the calculation for CQ is as follows:

$$CQ = ((Adjusted\ T * 5) + (Adjusted\ Q * 5) + (Adjusted\ RIV * 5)) / 15.$$

Due to normalisation of the T, Q and RIV values, the 'Adjusted T' for "Lidsan" in this instance is increased to 5. Similarly, the Adjusted Q rating is also 5. The RIV is already out of 5 (with Marmsell scoring 5) so normalisation has no effect on Lidsan's RIV. Applying the formula a CQ of 4.88 is calculated for Lidsan.

Returning to figure 11, the insurance company can choose an investigation company after reviewing the list of potential service providers and their associated suitability ratings (step 2.13) by clicking the appropriate

"radio button" followed by the "GO" button. Upon selection, an email is sent to the investigation company informing them of their selection. If this meets with the approval of the investigation company then they accept the job by clicking on a link on the email. Detailed instructions relating to the job can then follow in due course via known communication means such as email, post, courier or the like.

Upon the acceptance of the Service Request, the Service Request becomes an "Uncompleted Job" within the system. The insurance companies may view a list of Uncompleted Jobs by viewing a web page on the web site 22 that extracts from the database 18 all uncompleted jobs for that employee of the insurance companies as shown in Figure 13.

To facilitate the tracking of jobs an investigation companies can also view a list of all Uncompleted Jobs as shown in Figure 14.

Upon submission of the report by the investigation company, the cost of the investigation is entered into the database 18 via a web page on the web server 22. Either the investigation company or the insurance company may do this. Turning to Fig 15 the insurance company additionally rates the investigation company on the quality and timeliness of their report. This can be done in a number of ways using a number of performance criteria. As shown in Fig 15 a single quality rating "Q" has been used as a performance criteria, as well as a timeliness rating "T" and a rating of the reasonableness of the cost "P" of the investigation.

It will be appreciated that because the insurance company ranks the set of quality criteria as described above, the present embodiment allows the insurance company to assess the service provided by the investigation company according to its own priorities. If the insurance company, being in this case the selection system user, wants to assign a higher value to an investigation company with at least 5 years experience to complete particular investigation services or some other quality, the embodiment described above is very useful.

Furthermore by allowing each of the RIV, Q and T ratings to be weighted when calculating the CQ rating the insurance company can obtain a single suitability rating with their own desired weighting having already been given to all of the performance criteria of the investigation companies.

Additionally, it should also be realised that in this embodiment, because the investigation company is provided with an opportunity to evaluate the services performed by the investigation company after completion of the service, this assists the insurance company in dynamically assess the services of a multiplicity of investigation companies and thereby choose the most consistent service provided which is suited to its needs. It will therefore be appreciated that this provides the insurance company with the ability to choose an appropriate service provider of investigation services.

It would be appreciated by a person skilled in the art that numerous variations and/or modifications may be made to the present invention as shown in the specific embodiments without departing from the spirit or scope of the invention as broadly described. For example, the present selection system for investigation services here described has been implemented on the Internet, but other networks configurations could also be used to implement the present invention. The present embodiments are therefore, to be considered in all respects to be illustrative and not restrictive.

### Claims

1. A system for enabling the selection of a service provider from a plurality of service providers for the performance of a job, said system including:

a database which is accessible by a service user via a network, the database including a plurality of records, each record being associated with a service provider, wherein each record includes a service provider profile including a plurality of comparable performance criteria indicative of the performance attributes of the service provider;

interface means for receiving a job request comprising at least one desired performance criterion from said service user, and

processor means for comparing the stored comparable performance criteria and the at least one desired performance criterion, and for extracting at least one preferred service provider from the database on the basis of said comparison.

2. A system as claimed in claim 1 in which the processor means is arranged to extract a plurality of service providers from the database on the basis of said comparison, and to compile a list of the plurality of preferred service providers for distribution to the service user.

3. A system as claimed in either one of the preceding claims wherein said database is additionally accessible by said service providers via a network for enabling the service providers to update their associated performance profiles.

4. A system as claimed in any one of the preceding claims which includes prioritising means for allowing at least two desired performance criteria to be prioritised in accordance with user-selected priorities, and wherein said comparison is made in accordance with said prioritisation.

5. A system as claimed in any one of the preceding claims which includes weighting means for weighting at least some of the comparable performance criteria according to their relative importance to the user, to enable said comparison to be made in accordance with said weightings.

6. A system as claimed in any one of the preceding claims wherein said database includes at least one historical rating field associated with each service provider for enabling a service user to rate at least one past job performed by the service provider.

7. A system as claimed in any one of the preceding claims wherein said at least one desired performance criterion and said comparable performance criteria are selected from a group including the following classes of criteria:

quality criteria, cost criteria and timeliness criteria.

8. A system as claimed in claim 7 wherein said quality criteria relate to the quality and extent of the resources drawn on by the service provider.

9. A system as claimed in claim 7 wherein said cost criteria relate to at least one of the following, namely the current cost structure of the service provider, the average cost of similar jobs performed by the service provider in the past, and discounts offered by the service provider.

10. A system as claimed in claim 7 wherein said timeliness criterion reflects the timeliness of at least one past job performed by the service provider.

11. A system according to any one of the preceding claims in which each service provider profile includes at least one qualifying criterion indicative of the ability of the service provider to perform the job, and wherein the job request includes at least one desired qualifying criterion.

12. A system as claimed in claim 11 in which said qualifying criteria relate to at least one of the following, namely the type of service, the area of operation of the service provider and the availability of the service provider.

13. A system as claimed in any one of the preceding claims wherein said interface means is adapted to receive a selection confirmation from said service user identifying the service provider selected for the job.

14. A system as claimed in any one of the preceding claims wherein said system additionally includes generating means for generating and sending a job confirmation message to the service provider selected by the service user for the job.

15. A system as claimed in any one of the preceding claims wherein the job to be performed is an investigation.

16. A method of enabling a service user to select a service provider from a plurality of service providers for the performance of a job, said method including the steps of:

providing a database which is accessible by the service user via a network,

storing in said database a plurality of records, each record being associated with a service provider, wherein each record includes a service provider profile including a plurality of comparable performance criteria indicative of the performance attributes of the service provider;

receiving a job request comprising at least one desired performance criterion from said service user,

comparing the plurality of stored performance criteria with the desired performance criterion, and automatically selecting at least one preferred service provider from the database on the basis of said comparison.

17. A method as claimed in claim 16 in which a plurality of preferred service providers are automatically selected from the database, and said method additionally includes the step of:

compiling a list of the plurality of preferred service providers.

18. A method as claimed in either claim 16 or 17 which includes the additional step of:

periodically capturing and storing updated performance criteria in order to update the stored profile of least one service provider.

19. A method as claimed in claim 18 in which said database is accessible by said plurality of service providers and wherein said method includes the additional step of:

enabling the service providers periodically to update their associated performance profiles in the database.

20. A method as claimed in any one of claims 16 to 19 in which said job request includes a plurality of desired performance criteria and wherein said method additionally includes the steps of:

enabling the service user to prioritise at least two desired performance criteria; and

automatically selecting the at least one preferred service provider on the basis of the prioritisation.

21. A method as claimed in any one of claims 16 to 20 which includes the steps of:

allowing said user to allocate a weighting to said comparative performance criteria indicative of the relative importance of said comparative performance criteria to the service user; and

automatically selecting the at least one preferred service provider at least partially on the basis of said weightings.

22. A method as claimed in any one of claims 16 to 21 wherein said database includes at least one historical rating field associated with each service provider, and wherein said method includes the steps of :

enabling a service provider to rate at least one past job performed by said service provider; and

capturing said rating said at least one historical rating field associated with the service provider.

23. A method as claimed in any one of claims 16 to 22 wherein said at least one desired performance criterion and said comparable performance criteria are selected from a group including the following classes of criteria:

quality criteria, cost criteria, and timeliness criteria.

24. A method as claimed in claim 23 wherein said quality criteria relate to at least one of the following, namely the quality and extent of the resources drawn on the service provider.

25. A method as claimed in claim 23 wherein said cost criteria relate to at least one of the following, namely the current cost structure of the service providers, the average cost of similar jobs performed by the service provider in the past, and discounts offered by the service provider.

26. A method as claimed in claim 23 wherein said timeliness criterion reflects the timeliness of at least one past job performed by the service provider.

27. A method as claimed in any one of claims 19 to 26 in which each of said service provider profiles includes at least one stored qualifying criterion indicative of the ability of a service provider to perform the job, and in which said job request includes at least one qualifying criterion, wherein said method includes the initial step of;

comparing said stored qualifying criterion with said desired qualifying criterion to select at least one qualified service provider on the basis of said comparison;



wherein at least one preferred service provider is a subset of at least one qualified service provider so selected.

28. A method as claimed in claim 27 wherein said qualifying criteria relate to at least one of the following, the namely type of service, the area of operation of the service provider and the availability of the service provider.

29. A method as claimed in any one claims 16 to 28 in which said method includes the step of:

receiving a selection confirmation from said service user, stating at least the preferred service provider selected by the user.

30. A method as claimed in claim 30 wherein said method includes the step of :

generating and sending a job confirmation message to the service provider selected by the service user.

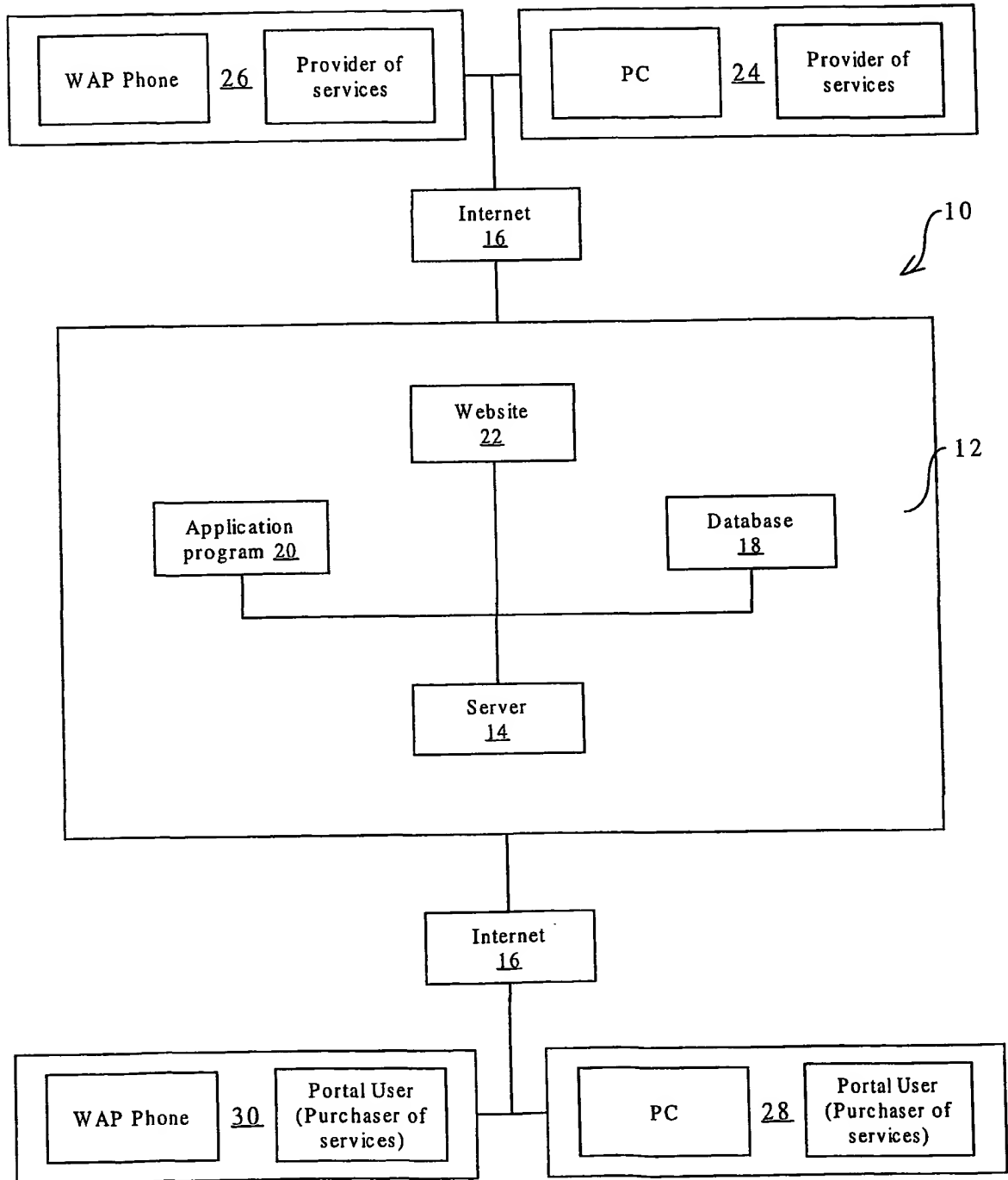
31. A method as claimed in any one of claims 16 to 27 wherein said services are insurance investigation services.

32. A system as claimed in claims 5 in which said weighting means operates according to the formula

$$\frac{\sum_{i=1}^n \text{Weighting}_i \cdot \text{Criterion}_i}{X n}$$

where  $\text{Weighting}_i$  is the weighting of the  $i$ th performance criterion allocated by the service user on a scale of 1 to X, and,  $\text{Criterion}_i$  is the value for the  $i$ th performance criterion stored in the database for each the service provider, and n is the total number of performance criterion.

1/18

**FIG 1**

SUBSTITUTE SHEET (RULE 26) RO/AU

2/18

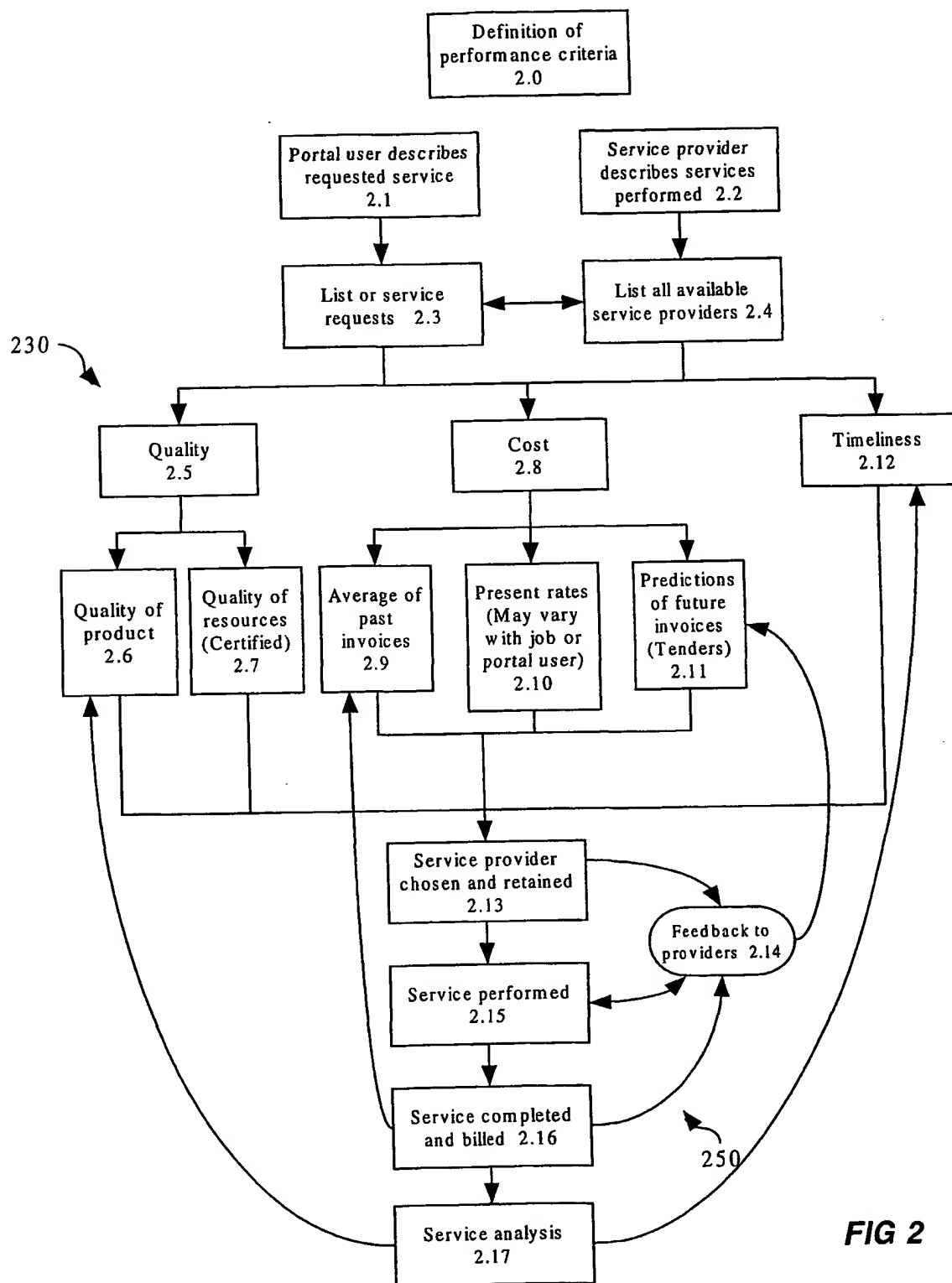


FIG 2

3/18

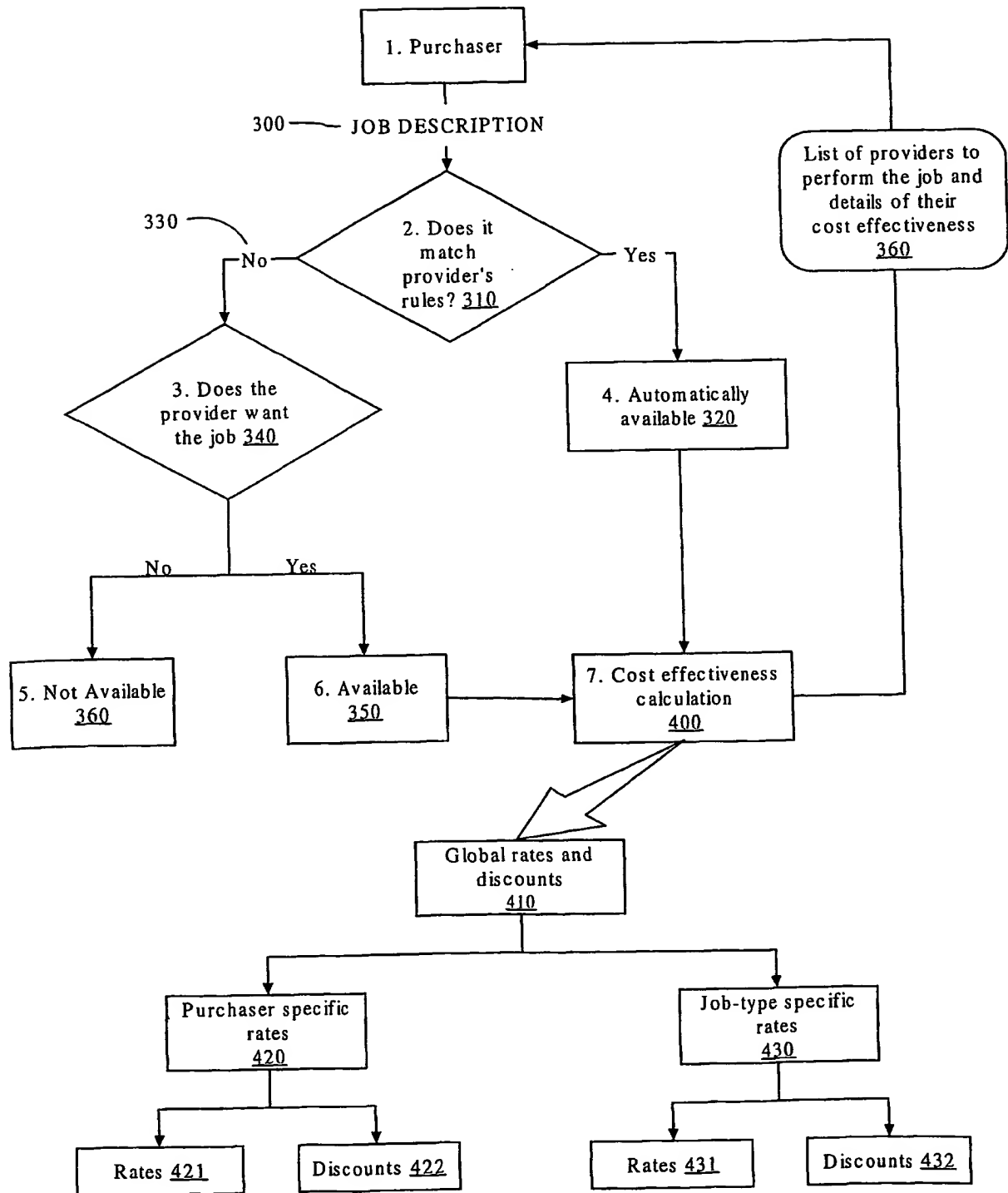


FIG 2A

4/18

File Edit View

Back

Forward

Stop

Refresh

Home

Go

Link

Address: <http://www.investigationmarketplace.com/index.php>

Investigation MARKETPLACE

Insurance Company

Claims Officers

News

Add Job

Open Tenders

Uncompleted Jobs

Completed Jobs

Reports

Prefs

About IAMP

Market Participants

Help

Add Job

File Number

3413331

File Name

Billy Button

panel

Default

Cancel

Next

This information is not seen by investigation companies

Done

© 2000 River Dynamics

Internet

FIG 3

5/18

File Edit View

Back Forward Stop Refresh Home

Address: <http://www.investigationmarketplace.com/index.php>

Investigation MARKETPLACE

Insurance Company
Claims Officers

About IMP
Market Participants
Help

News
Add Job
Open Tenders

Completed Jobs
Uncompleted Jobs
Reports
Prelis

### Add Job

Business Category

CTP

Job Type

Surveillance

Job Completion Date

11.00

22

Sep

2000

Base Suburb

None

Suburb

Interviews/Hours

Sessions

Hurstville	12	3
Gosford	16	4
		1
		1

Cancel
Next

Done

© 2000 River Dynamics

FIG 4

6/18

File

Edit

View

Back

Forward

Stop

Refresh

Home

Go

Link

Address: <http://www.investigationmarketplace.com/index.php>

Investigation MARKETPLACE

Insurance Company

Claims Officer

News

Add Job

Open Tenders

Uncompleted Jobs

Completed Jobs

Reports

Prets

Market Participants

Help

File Number

Billy Button

File Name

3413331

Job Completion Date

22/09/2000

Job Type

Surveillance

Job Category

1

Base Suburb

None

Suburb

Interviews/Hours

Sessions

Hurstville

12

3

Gosford

16

4

Cancel

Amend

Finish

Add Job

Done

Internet

© 2000 River Dynamics

FIG 5

7/18

File Edit View		Back Forward Stop Refresh Home		Go Link	
Address: <a href="http://www.investigationmarketplace.com/index.php">http://www.investigationmarketplace.com/index.php</a>					
<b>Investigation MARKETPLACE</b>		Insurance Company Claims Officer		About IMP Market Participants Help	
News Add Job Open Tenders		Uncompleted Jobs Completed Jobs Reports		Pricing	

### Intangible Ratings

Intangibles are factors that add value to a report but that may not be apparent on the face of the report.

Business Overview				
1	2-3	4-7	8-10	11+
How many years has your firm been licensed to conduct investigations?				
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you operate your investigation or surveillance firm from premises used solely for the operation of the business (ie a Commercial Premises rather than a combined Commercial/Residential Premises)?				
Yes	<input type="radio"/>	No	<input type="radio"/>	<input type="radio"/>
How many full-time investigators work solely for your firm?				
1	<input type="radio"/>	2-3	<input type="radio"/>	4-7
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	8-10
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	11+
Do any of your operatives work for other investigation or surveillance firms?				
Yes	<input type="radio"/>	No	<input type="radio"/>	<input type="radio"/>
Does your firm employ a full-time staff-member who is qualified as a Justice of the Peace?				
Yes	<input type="radio"/>	No	<input type="radio"/>	<input type="radio"/>
Does your firm have a full-time skip tracer on staff?				
Yes	<input type="radio"/>	No	<input type="radio"/>	<input type="radio"/>

Document Retention and Security	<input type="radio"/>
Does your premises have a commercial grade intruder alarm system that complies with 2201.2 Grade 1? Will a security company patrol officer attend your premises not more than 30 minutes from the time of alarm activation?	<input type="radio"/>

Done Internet

FIG 6



8/18

File

Edit

View

Back

Forward

Stop

Refresh

Home

Address: <http://www.investigationmarketplace.com/index.php>

Go

Link

Investigation E

MARKETPLACE 4

Insurance Company

Claims Officer

News

Add Job

Open Tenders

About IMP

Market Participants

Help

Reports

Completed Jobs

Uncompleted Jobs

Profits

Auto-estimate

Add Rule

Distance

100 km

Job Type

☒ Factual
 ☒ Surveillance

Business Category

☒ CTP
 ☒ PL
 ☒ WC

Add New Rule

Done

Internet

FIG 7

9/18

File
Edit
View

Back
Forward
Stop
Refresh
Home

Address: http://www.investigationmarketplace.com/index.php

Investigation  
MARKETPLACE

Insurance Company
Claims Officer

About IMP
Market Participants
Help

News
Add Job
Open Tenders
Completed Jobs
Reports
Prefs

Auto-estimate

Surveillance	
Travel Rate	\$50.00
Per Kilometre Rate	\$0.50
Hourly Rate	\$50.00
Factual	
Travel Rate	\$50.00
Per Kilometre Rate	\$0.50
Hourly Rate	\$50.00
Cancel	Go

Charge Rates

For every 12 Jobs decrease Investigation, Travel and Kilometre charge rates by 1 percent.

Done
Internet

FIG 7A

10/18

File Edit View

Back Forward Stop Refresh Home

Address: <http://www.investigationmarketplace.com/index.php>

**Investigation MARKETPLACE 4**

Insurance Company Claims Officer

News Add Job Open Tenders

About DMP Market Participants Help

Reports Preifs

Completed Jobs

Uncompleted Jobs

Hours/Interviews

Bill-out Suburb

Travel Charge %

JobBox

**Pending Tenders**

Category	Job Type	Completion Date	Base Suburb	Suburbs(s)	Hours/Interviews	Bill-out Suburb	Travel Charge %	JobBox
CTP	Surveillance	7/9/00		Bondi	12	Maroubra	100	<input type="checkbox"/> Cancel Job
CTP	Factual	7/9/00		Gosford	3	Parramatta	100	<input type="checkbox"/> Cancel Job
CTP	Surveillance	21/9/00		Bondi	16	Maroubra	100	<input type="checkbox"/> Cancel Job
CTP	Surveillance	22/9/00		Hurstville, Gosford	28	Parramatta	100	<input type="checkbox"/> Cancel Job
CTP	Factual	22/9/00		Gosford	3	Parramatta	100	<input type="checkbox"/> Cancel Job
								<input type="button" value="Go!"/>

Done

Internet

© 2000 River Dynamics

FIG 8

11/18

File Edit View

Back Forward Stop Refresh Home

Address: http://www.investigationmarketplace.com/index.php

Investigation  
MARKETPLACE 4

Insurance Company  
News

Claims Officer  
Open Tenders

About IMP  
Reports

Market Participants  
PreIs

Help

### Available Jobs

Intro text

Category	Job Type	Completion Date	BaseSuburb	Suburbs(s)	Hours/Interviews	Bill-out Suburb	Travel Charge %	JobBox
CTP	Factual	7/9/00		Gosford	3		100	<input type="checkbox"/>
CTP	Surveillance	22/9/00		Hurstville, Gosford	28		100	<input type="checkbox"/>
CTP	Factual	22/9/00		Gosford	3		100	<input type="checkbox"/>
								<input type="button" value="Go!"/>

Done

Internet

FIG 9

12/18

File Edit View		Back Forward Stop Refresh Home		Go Link	
Address: <a href="http://www.investigationmarketplace.com/index.php">http://www.investigationmarketplace.com/index.php</a>					
<b>Investigation MARKETPLACE</b>		<a href="#">About IMP</a> <a href="#">Market Participants</a> <a href="#">Help</a>			
<a href="#">Insurance Company</a> <a href="#">Claims Officer</a>		<a href="#">Reports</a> <a href="#">Prets</a>			
<a href="#">News</a> <a href="#">Add Job</a>		<a href="#">Uncompleted Jobs</a> <a href="#">Completed Jobs</a>			
		<a href="#">Open Tenders</a>			

### Open Tenders

File Number	File Name	Job Type	Expected Completion Date	Review Tenders	Cancel Job
12940903	Sarah Saharah	Factual	7/9/2000	X	X
345435	Robyn Sparrow	Surveillance	21/9/2000	X	X
3413331	Billy Button	Surveillance	22/9/2000	X	X

Done	Internet
------	----------

© 2000 River Dynamics

FIG 10

13/18

File

Edit

View

Back

Forward

Stop

Refresh

Home

Address: <http://www.investigationmarketplace.com/index.php>

Go

Link

Investigation MARKETPLACE 4

Insurance Company

Claims Offices

About DMP

Market Participants

Help

Reports

Completed Jobs

Preifs

Company Name	CO	RIV	Q	I	Accept Bid	Current Discount
Marmesell Investigations 1	4.43	5	3.18	3.2	<input checked="" type="radio"/>	30%
Dumbrell Investigations 2	4.32	3.29	3.65	3.8	<input type="radio"/>	20%
Evans Investigations 4	4.82	4.63	3.63	3.95	<input type="radio"/>	0%
Lidsan Investigations 3	4.88	4.64	3.71	4	<input type="radio"/>	0%
Mesle Investigations 5	4.36	3.42	3.46	4	<input type="radio"/>	0%

Go!

Done

Internet

© 2000 River Dynamics

FIG 11

14/18

File

Edit

View

Back

Forward

Stop

Refresh

Home

Go

Link

Address: <http://www.investigationmarketplace.com/index.php>

Investigation MARKETPLACE 4

Insurance Company

Claims Officer

About IMP

Market Participants

Help

News

Add Job

Open Tenders

Uncompleted Jobs

Completed Jobs

Reports

Prefs

File Number

232211

File Name

Grant Hacker

Job Completion Date

09/09/2009

Job Type

Factual

Job Category

PL

Base Suburb

None

Investigation Company

Lidsan Investigations

Contact

Alice Symmes

Email

[Bidder@investigationmarketplace.com](mailto:Bidder@investigationmarketplace.com)

Phone

02 48642346

Mailing Address

City

State

PostCode

Country

Suburb

Interviews/Hours

4

Sessions

1

Billed from: Parramatta

Return trip Distance: 21Km

Return trip Time: 0.48 Hours

Total Distance: 21Km

Total Time: 0.48 Hours

Fairfield

Add New Suburb

Suburb

Interviews/Hours

Sessions

1

Go

Go

Done

Internet

FIG 11A

15/18

File Edit View		Back Forward Stop Refresh Home		Go Link	
Address: <a href="http://www.investigationmarketplace.com/index.php">http://www.investigationmarketplace.com/index.php</a>					
Investigation MARKETPLACE		Insurance Company Claims Officer		About IMP Market Participants Help	
News Add Job Open Tenders		Uncompleted Jobs Completed Jobs Reports Prebs			

### Intangible Ratings

Intangibles are factors that add value to a report but that may not be apparent on the face of the report.

	Business Overview				
	1	2	3	4	5
How many years has your firm been licensed to conduct investigations?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you operate your investigation or surveillance firm from premises used solely for the operation of the business (ie a Commercial Premises rather than a combined Commercial/Residential Premises)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How many full-time investigators work solely for your firm?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do any of your operatives work for other investigation or surveillance firms?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Does your firm employ a full-time staff-member who is qualified as a Justice of the Peace?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Does your firm have a full-time skip tracer on staff?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Document Retention and Security				
	1	2	3	4	5
Does your premises have a commercial grade intruder alarm, monitored by a central station that complies with 2201.2 Grade 1? Will a security company patrol off premises not more than 30 minutes from the time of alarm activation?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Done Internet

FIG 12



16/18

File Edit View

Back Forward Stop Refresh Home

Address: <http://www.investigationmarketplace.com/index.php>

**Investigation MARKETPLACE**

Insurance Company Claims Offices

News Add Job Open Tenders

Uncompleted Jobs Completed Jobs Reports Pref's

About DMP Market Participants Help

Go Link

### Uncompleted Jobs

This is where intro text will go

It could be a paragraph or 2.

File Number	File Name	Job Type	Expected Completion Date	Investigation Company	Close Job	Review Job	Cancel Job
12343	Jimble Durant	Surveillance	5/9/2000	Dumbrell Investigations	X	X	X
2340-4404	Randy Heller	Factual	5/9/2000	Dumbrell Investigations	X	X	X
342213	Randall Hope	Surveillance	9/9/2000	Marmsell Investigations	X	X	X
2134323	Bill Jackson	Factual	5/9/2000	Evans Investigations	X	X	X
314321	Bill Brost	Factual	6/11/2000	Marmsell Investigations	X	X	X
1234	April May	Surveillance	7/9/2000	Marmsell Investigations	X	X	X
1234324	Billie Walton	Surveillance	7/9/2000	Marmsell Investigations	X	X	X

© 2000 River Dynamics

Done Internet

FIG 13

17/18

File Edit View		Back Forward Stop Refresh Home		Go Link	
Address: <a href="http://www.investigationmarketplace.com/index.php">http://www.investigationmarketplace.com/index.php</a>					
Investigation MARKETPLACE		Insurance Company Claims Officer News		About IMP Market Participants Help	
Aid Job		Open Tenders		Reports Pre's	
Uncompleted Jobs		Completed Jobs			

### Uncompleted Jobs

Category	Job Type	Name	Completion Date	BaseSuburb	Suburbs(s)	Hours/ Interviews
CTP	Surveillance	Randall Hope	9/9/00			4
CTP	Factual	Bill Brost	6/11/00		Bondi	12
CTP	Surveillance	April May	7/9/00		Bondi	24
CTP	Surveillance	Billie Walton	7/9/00		Bondi	

Done	Internet
------	----------

© 2000 River Dynamics

FIG 14

18/18

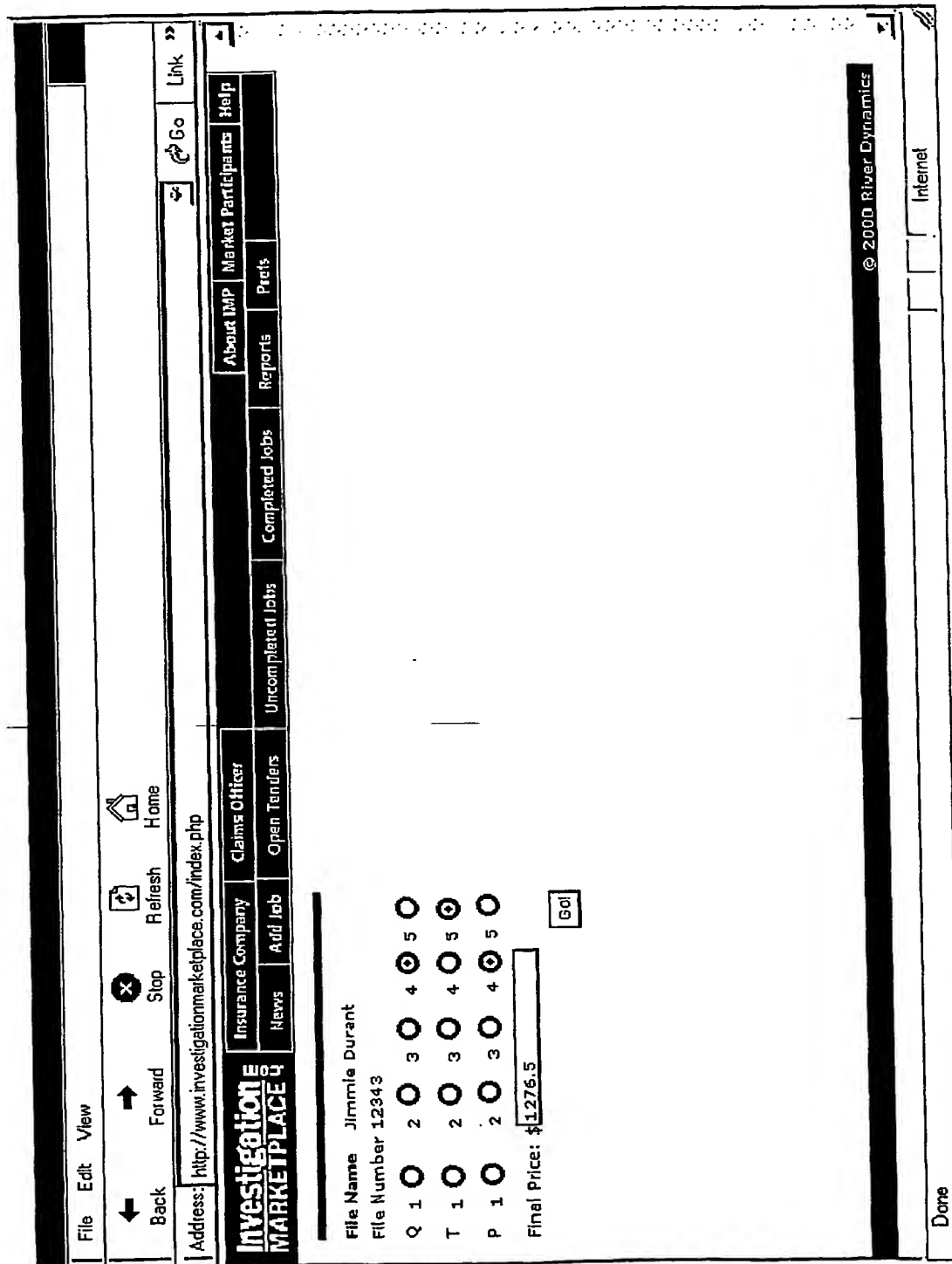


FIG 15

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/AU01/00660**A. CLASSIFICATION OF SUBJECT MATTER**Int. Cl. <sup>7</sup>: G06F 17/60

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

G06F 17/60

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPAT + Keywords

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	US 6178424 (Okumura et al.) 23 January 2001 Whole Specification.	1 to 30
X	EP 952539 (Nortel Networks Corp.) 27 October 1999 Whole Specification.	1 to 30
X	AU 676823 (Walshaw) 20 March 1997 Whole Specification.	1 to 30

☒ Further documents are listed in the continuation of Box C
 ☒ See patent family annex

* Special categories of cited documents:		"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E"	earlier application or patent but published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search  
2 August 2001Date of mailing of the international search report  
8 August 2001Name and mailing address of the ISA/AU  
AUSTRALIAN PATENT OFFICE  
PO BOX 200, WODEN ACT 2606, AUSTRALIA  
E-mail address: pct@ipaustalia.gov.au  
Facsimile No. (02) 6285 3929

Authorized officer

J.W. THOMSON

Telephone No : (02) 6283 2214

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.  
**PCT/AU01/00660**

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member	
EP	952539	US	6101486
US	6178424	JP	10320416
END OF ANNEX			

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**